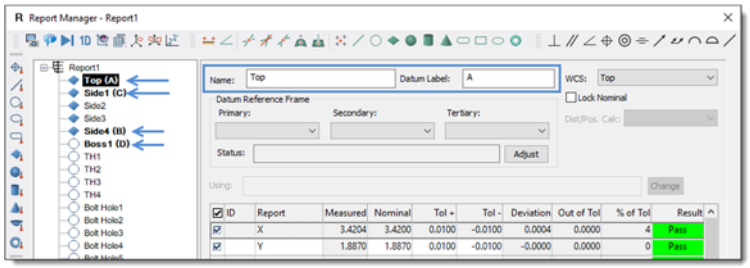
Technical Tip - Using Datum Reference Frames

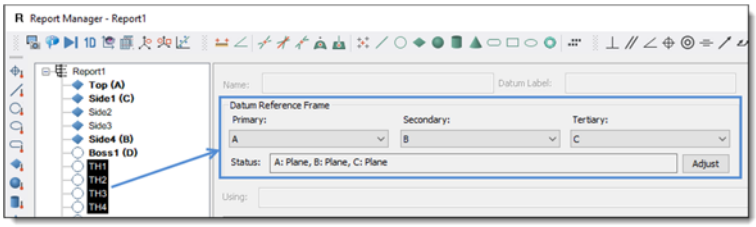
Within the Report Manager the Verisurf Dynamic Datum Reference Frame (DRF) tool is a powerful function that allows you to create Datum Reference Frame alignments using Feature Data found in the Report Manager Data List.

By assigning Datum Labels (A, B, C etc.) to the measured feature that represents the Datum you create a virtual Datum Reference Frame Alignment where A is Primary, B is Secondary and C is Tertiary. After assigning the Datum Labels the coordinate values of the features are relative to the Datum Reference Frame Controls (Primary, Secondary, Tertiary) for each Feature in the Data List.

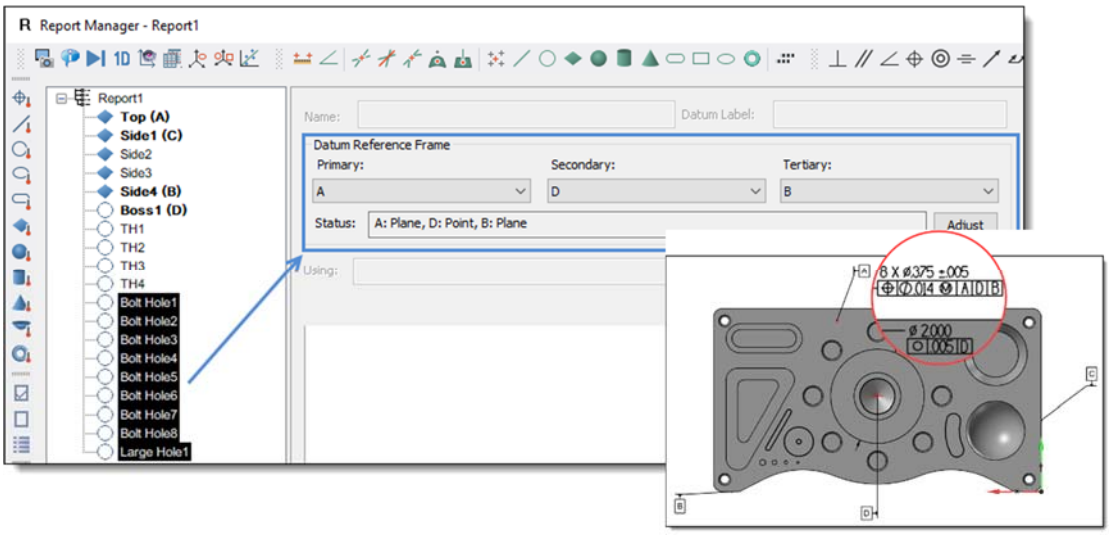
1. Assign **Datum Labels** - in the example shown below 'Top' is assigned (using **Datum Label** control) as Datum A (Primary), Side4 as Datum B (Secondary) and Side1 as Datum C (Tertiary), 'Boss" is assigned as auxillary Datum D:



2. In this example the four tool holes in the corner were measured as TH1-TH4 and must be reported to Datums A/B/C so we simply assign the DRF to the Features, by selecting all the Features in the Data List and using the drop down controls for Primary, Secondary and Tertiary:



3. In this example the eight Bolt Holes and Large Center Hole are reported using Datums A, D and B:



4. When a Report is generated, the results are based on the assigned DRF.